

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (currently amended): A method for resynchronizing a primary volume in a primary system and a secondary volume in a secondary system over a network, comprising:

when a network connection between the primary system and the secondary system is interrupted:

creating a snapshot of the primary volume, the snapshot identifying only original data from the primary volume that are overwritten after the snapshot is created;

determining data updates transmitted from the primary system to the secondary system that were not acknowledged by the secondary system;

when the network connection is reestablished:

based on the snapshot, determining ~~differences between the snapshot and the primary volume, wherein the differences comprise~~ new data written to [[in]] the primary volume ~~that were changed~~ between when the network connection is interrupted and reestablished; and

transmitting the ~~differences~~ new data and the unacknowledged data updates from the primary system to the secondary system.

Claim 2 (currently amended): The method of claim 1, further comprising, when the network connection is reestablished, updating the secondary volume with the ~~differences~~ new data and the unacknowledged data updates, wherein the secondary volume becomes an updated copy of the primary volume.

Claim 3 (original): The method of claim 1, prior to said creating a snapshot, further comprising blocking writes to the primary volume.

Claim 4 (original): The method of claim 3, after said creating a snapshot and said determining data updates, further comprising resuming writes to the primary volume.

Claim 5 (original): The method of claim 1, further comprising deleting the snapshot after said transmitting.

Claim 6 (currently amended): The method of claim 1, wherein said determining ~~differences between the snapshot and the primary volume~~ new data comprises:

~~looking up~~ searching for exceptions in exception tables in the snapshot, wherein the exception tables only identify the original data that were (1) in the primary volume at a time the snapshot was created and (2) later overwritten after the snapshot was created; and
based on the original data in the snapshot, looking up the new data in the primary volume that correspond to the original data.

Claim 7 (currently amended): A method for resynchronizing a primary volume in a primary system and a secondary volume in a secondary system over a network, comprising:

when a network connection between the primary system and the secondary system is interrupted:

blocking writes to the primary volume;

creating a snapshot of the primary volume, the snapshot identifying only original data from the primary volume that are overwritten after the snapshot is created;

resuming writes to the primary volume;

when the network connection is reestablished:

based on the snapshot, determining ~~differences between the snapshot and the primary volume, wherein the differences comprise~~ new data written to ~~[[in]]~~
the primary volume ~~that were changed~~ between when the network connection is interrupted and reestablished, said determining comprising:

searching for exceptions in exception tables in the snapshot, wherein the exception tables only identify the original data that were (1) in the primary volume at a time the snapshot was created and (2) later overwritten after the snapshot was created;

based on the original data in the snapshot, looking up the new data in the primary volume that correspond to the original data;

transmitting the ~~differences~~ new data and the unacknowledged data updates from the primary system to the secondary system;

updating the secondary volume with the ~~differences~~ new data and the unacknowledged data updates, wherein the secondary volume becomes an updated copy of the primary volume; and

deleting the snapshot after said transmitting.